AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims, in the application:

LISTING OF THE CLAIMS:

1. Canceled.

2. (Currently Amended) The method of claim ~~1~~10 further comprising repeating said first message sending step through said determining step until a termination condition is met.

3. (Original) The method of claim 2 further comprising synchronizing the second clock to the first clock using the accumulated delay.

4. (Original) The method of claim 3 wherein said synchronizing step comprises:

computing an average delay from the accumulated delay; and

applying the average delay as an offset to a time of the second clock.

5. (Original) The method of claim 4 wherein said average delay is computed by dividing the accumulated delay by a maximum number of times said first message sending step through said determining step are to be repeated.

6. (Original) The method of claim 2 wherein said method calculates a number of times said method executes said first message sending step through said determining step and terminates after said number of times equals a predefined number of times.

7. (Original) The method of claim 6 wherein said predefined number of times is twenty.

8.-Canceled.

9. Canceled.

10. (Currently Amended) ~~The method of claim 9 wherein said step of determining if~~

~~the calculated transmission delay is within the window comprises:~~A method of performing time synchronization between a clock master having a first clock and a clock slave having a second clock, said method comprising the steps of:

(a) sending a first message to the clock master, the first message comprising information indicating a transmission time ("first transmission time") of the first message;

(b) receiving a second message from the clock master, the second message comprising information indicating a reception time ("first reception time") of the first message and a transmission time ("second transmission time") of the second message;

(c) obtaining at the clock slave a reception time ("second reception time") of the second message;

(d) calculating a transmission delay between the clock slave and clock master from the first and second reception times and the first and second transmission times;

(e) determining if the calculated transmission delay is within a time window; and

(f) updating an accumulated delay with the calculated transmission delay if the calculated transmission delay is within the time window;

wherein said window has a first and a second threshold, said thresholds are adjustable such that the window is a sliding window, the first threshold represents a best delay, the second threshold represents a maximum allowable difference from the best delay, and the best delay is a minimum calculated transmission delay;

and wherein said step of determining if the calculated transmission delay is within the window comprises:

determining if the calculated transmission delay is less than the best delay; and

if the calculated transmission delay is less than the best delay; storing the

calculated transmission delay as the updated best delay, discarding the calculated transmission delay, resetting the accumulated delay, and ~~ensuring that said method executes said first message sending step through said determining step an additional number of times~~ repeating steps (a)-(e) at least one further time.

11. (Currently Amended) ~~The method of claim 1 wherein said step of determining if the calculated transmission delay is within the window comprises:~~ A method of performing time synchronization between a clock master having a first clock and a clock slave having a second clock, said method comprising the steps of:

(a) sending a first message to the clock master, the first message comprising information indicating a transmission time ("first transmission time") of the first message;

(b) receiving a second message from the clock master, the second message comprising information indicating a reception time ("first reception time") of the first message and a transmission time ("second transmission time") of the second message;

(c) obtaining at the clock slave a second reception time of the second message;

(d) calculating a transmission delay between the clock slave and clock master from the first and second reception times and the first and second transmission times;

(e) determining if the calculated transmission delay is within a time window of acceptable delays and updating an accumulated delay with the calculated transmission delay if the calculated transmission delay is within the time window;

(f) determining if said calculated transmission delay is less than a best delay, wherein the best delay represents a calculated transmission delay with a smallest delay in comparison to other calculated transmission delays; and

(g) if the calculated transmission delay is less than the best delay, storing

the calculated transmission delay as the updated best delay, discarding the calculated transmission delay, resetting the accumulated delay and ~~ensuring that said method executes said first message sending step through said determining step an additional number of times~~ repeating steps (a)-(f) at least one further time.

12. (Currently Amended) The method of claim 11 wherein said step of determining if the calculated transmission delay is within the window further comprises:

calculating a difference between said calculated transmission delay and the best delay;

determining if the calculated difference exceeds a maximum allowable difference; and

if the calculated difference exceeds the maximum allowable difference, discarding the calculated transmission delay, and ensuring that said method executes ~~said first message sending step through said determining step~~ steps (a)-(f) an additional time.

13. (Currently Amended) The method of claim ~~1~~11 wherein the first transmission and first reception times of the first message are generated using the second clock.

14. (Currently Amended) The method of claim ~~1~~11 wherein the second transmission and second reception times of the second message are generated using the first clock.

15. Canceled.

16. (Currently Amended) The method of claim ~~1~~11 wherein the first and second clocks are synchronous.

17. Canceled.

18. (Currently Amended) The method of claim ~~17~~22 further comprising repeating said first message receiving step through said determining step until a termination condition is met.

19. (Original) The method of claim 18 further comprising synchronizing a clock of

the clock slave to a clock of the clock master using the accumulated delay.

20-21 Canceled.

22. (Currently Amended) ~~The method of claim 21 wherein said step of determining if the calculated transmission delay is within the window comprises:~~ A method of performing time synchronization between a clock master and a clock slave, said method comprising the steps of:

(a) receiving a first message from the clock slave;

(b) sending a second message to the clock slave;

(c) calculating a transmission delay between the clock slave and clock master from reception and transmission times of the first and second messages;

(d) determining if the calculated transmission delay is within a time window and updating an accumulated delay with the calculated transmission delay if the calculated transmission delay is within the time window;

(e) determining if said calculated transmission delay is less than the best delay; and

if the calculated transmission delay is less than the best delay~~,~~: storing the calculated transmission delay as the updated best delay, discarding the calculated transmission delay, resetting the accumulated delay, and repeating steps (a)-(e) at least one further time ~~ensuring that said method executes said first message receiving step through said determining step an additional number of times.~~;

wherein said window has a first and a second threshold, said thresholds are adjustable such that the window is a sliding window, the first threshold represents a best delay, the second threshold represents a maximum allowable difference from the best delay, and the best delay is a minimum calculated transmission delay.

23. (Currently Amended) ~~The method of claim 17 wherein said step of determining if the calculated~~

~~transmission delay is within the window comprises:~~A method of performing time synchronization between a clock master and a clock slave, said method comprising the steps of:

(a) receiving a first message from the clock slave;

(b) sending a second message to the clock slave;

(c) calculating a transmission delay between the clock slave and clock master from reception and transmission times of the first and second messages;

(d) determining if the calculated transmission delay is within a time window and updating an accumulated delay with the calculated transmission delay if the calculated transmission delay is within the window;

(e) determining if said calculated transmission delay is less than a best delay, wherein the best delay represents a calculated transmission delay with a smallest delay in comparison to other calculated transmission delays; and

(f) if the calculated transmission delay is less than the best delay, storing the calculated transmission delay as the updated best delay, discarding the calculated transmission delay, resetting the accumulated delay, and repeating steps (a)-(e) at least one further time. ~~ensuring that said method executes said first message receiving step through said determining step an additional number of times.~~

24. (Currently Amended) The method of claim 23 wherein said step of determining if the calculated transmission delay is within the window further comprises:

calculating a difference between said calculated transmission delay and the best delay;

determining if the calculated difference exceeds a maximum allowable difference; and

if the calculated difference exceeds the maximum allowable difference,

discarding the calculated transmission delay, and ensuring that said method executes ~~said first message receiving step through said determining step~~ steps (a)-(e) an additional time.

25-31 Canceled.

32. (Currently Amended) ~~The base station of claim 31 wherein said controller determines if the calculated transmission delay is within the window by:~~A base station for use in a wireless telecommunications system comprising:

a clock; and

a controller for:

sending a first message to a clock master of said system comprising information indicating a transmission time ("first transmission time") of the first message;

receiving a second message from the clock master comprising information indicating a reception time ("first reception time") of the first message and a transmission time ("second transmission time") of the second message;

obtaining a reception time ("second reception time") of the second message;

~~32.~~calculating a transmission delay from the first and second reception times and the first and second transmission times;

determining if the calculated transmission delay is within a time window and updating an accumulated delay with the calculated transmission delay if the calculated transmission delay is within the time window;

determining if the calculated transmission delay is less than the best delay; and

if the calculated transmission delay is less than the best delay, storing the calculated transmission delay as the best delay, discarding the calculated transmission delay, resetting the accumulated delay and re-sending the first

message an additional number of times.;

wherein said window has a first and a second threshold, said thresholds are adjustable such that the window is a sliding window, the first threshold represents a best delay, the second threshold represents a maximum allowable difference from the best delay, and the best delay is a minimum calculated transmission delay.

33. (Currently Amended) ~~The base station of claim 25 wherein said controller determines if the calculated transmission delay is within the window by:~~A base station for use in a wireless telecommunications system comprising:

a clock; and

a controller for:

sending a first message to a clock master of said system comprising information indicating a first transmission time of the first message;

receiving a second message from the clock master comprising information indicating a first reception time of the first message and a second transmission time of the second message;

obtaining a second reception time of the second message;

calculating a transmission delay from the first and second reception times and the first and second transmission times;

determining if the calculated transmission delay is within a time window and updating an accumulated delay with the calculated transmission delay if the calculated transmission delay is within the time window;

determining if said calculated transmission delay is less than a best delay, wherein the best delay represents a calculated transmission delay with a smallest delay in comparison to other calculated transmission delays; and

if the calculated transmission delay is less than the best delay, storing the

calculated transmission delay as the updated best delay, discarding the calculated transmission delay, resetting the accumulated delay and re-sending the first message ~~an additional number of times~~ at least one further time.

34. (Currently Amended) The base station of claim 33 wherein controller further determines if the calculated transmission delay is within the time window by:

calculating a difference between said calculated transmission delay and the best delay;

determining if the calculated difference exceeds a maximum allowable difference; and

if the calculated difference exceeds the maximum allowable difference, discarding the calculated transmission delay, and re-sending said first message an additional time.

35. (Currently Amended) The base station of claim ~~25~~33 wherein the first transmission and first reception times of the first message are generated using said clock of said base station.

36. (Currently Amended) The base station of claim ~~25~~33 wherein the second transmission and second reception times of the second message are generated using the clock of the clock master.

37. (Currently Amended) The base station of claim ~~25~~33 wherein said controller is a programmed processor.

38. (Currently Amended) The base station of claim ~~25~~33 wherein said controller is an application specific integrated circuit (ASIC).

39. Canceled.

40. (Currently Amended) The base station of claim ~~25~~33 wherein said clock of said base station and the clock of the clock master are synchronous.

41. (Currently Amended) The base station of claim ~~25~~33 wherein said telecommunications system is a CDMA system.

42. (Original) The base station of claim 41 wherein the clock master is a radio network controller.

43-49 Canceled.

50. (Currently Amended) ~~The method of claim 49 wherein said step of determining if the calculated transmission delay is within the window comprises:~~A method for performing time synchronization between a clock master and a clock slave, said method comprising the steps of:

(a) receiving a first message from the clock slave;

(b) sending a second message to the clock slave;

(c) calculating a transmission delay between the clock slave and clock master from reception and transmission times of the first and second messages;

(d) determining if the calculated transmission delay is within a time window of acceptable delays, said window being a sliding window such that thresholds of said window are adjusted whenever a minimum calculated transmission delay is obtained;

(e) updating an accumulated delay with the calculated transmission delay;

(f) determining if said calculated transmission delay is less than the best delay; and

(g) if the calculated transmission delay is less than the best delay, storing the calculated transmission delay as the updated best delay, discarding the calculated transmission delay, resetting the accumulated delay and repeating steps (a)-(f) at least one further time ~~ensuring that said method executes said first message receiving step through said determining step an additional number of times.~~;

wherein a first threshold represents a best delay and a second threshold represents a maximum allowable difference from the best delay, and wherein

the best delay represents a calculated transmission with a smallest delay in comparison to other calculated transmission delays.

51. (Currently Amended) ~~The method of claim 48 wherein said step of determining if the calculated transmission delay is within the window comprises:~~A method for performing time synchronization between a clock master and a clock slave, said method comprising the steps of:

(a) receiving a first message from the clock slave;

(b) sending a second message to the clock slave;

(c) calculating a transmission delay between the clock slave and clock master from reception and transmission times of the first and second messages;

(d) determining if the calculated transmission delay is within a time window of acceptable delays, said time window being a sliding window such that thresholds of said window are adjusted whenever a minimum calculated transmission delay is obtained;

(e) updating an accumulated delay with the calculated transmission delay;

(f) determining if said calculated transmission delay is less than a best delay, wherein the best delay represents a calculated transmission delay with a smallest delay in comparison to other calculated transmission delays; and

if the calculated transmission delay is less than the best delay, storing the calculated transmission delay as the best delay, discarding the calculated transmission delay, resetting the accumulated delay and repeating steps (a)-(f) at least one further time ~~ensuring that said method executes said first message receiving step through said determining step an additional number of times~~.

52. (Previously Presented) The method of claim 51 wherein said step of determining if the calculated transmission delay is within the time window further comprises:

calculating a difference between said calculated transmission delay and the best delay;

determining if the calculated difference exceeds a maximum allowable difference; and

if the calculated difference exceeds the maximum allowable difference, discarding the calculated transmission delay, and repeating steps (a)-(d) an additional time ~~ensuring that said method executes said first message receiving step through said determining step an additional time~~.

53. Canceled.

54. (Currently Amended) ~~The base station of claim 53 wherein said controller determines if the calculated transmission delay is within the window by:~~A base station for use in a wireless telecommunications system comprising:

a clock; and

a controller for:

sending a first message to a clock master of said system comprising information indicating a transmission time ("first transmission time") of the first message;

receiving a second message from the clock master comprising information indicating a reception time ("first reception time") of the first message and a transmission time ("second transmission time") of the second message;

obtaining a reception time ("second reception time") of the second message;

calculating a transmission delay from the first and second reception times and the first and second transmission times;

determining if the calculated transmission delay is within a time window of

acceptable delays, said time window being a sliding window such that thresholds of said time window are adjusted whenever a minimum calculated transmission delay is obtained, and updating an accumulated delay with the calculated delay if the calculated delay is within the time window;

determining if the calculated delay is less than the best delay; and

if the calculated transmission delay is less than the best delay, storing the calculated transmission delay as the best delay, discarding the calculated transmission delay, resetting the accumulated delay and re-sending the first message an additional number of times.

55-56 Canceled.